

Notice of Allowability

Application No.

09/511,358

Examiner

Wai-Sing Louie

Applicant(s)

KOZUKA ET AL.

Art Unit

2814

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/23/2004.
2. ☒ The allowed claim(s) is/are 1-3,5-10 and 17.
3. ☒ The drawings filed on 23 February 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John A. Krause on 11/9/2004.

The application has been amended as follows:

In the claim

Cancel claims 11-16.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

The claimed invention is a photoelectric conversion device comprising:

- A first-conductivity type first semiconductor region located in a pixel region;
- A second-conductivity type second semiconductor region provided in the first semiconductor region and capable of accumulating photoelectric carriers in a floating state, wherein said first and second semiconductor regions form a photodiode;

- A wiring for electrically connecting directly the second semiconductor region to a circuit element located outside the pixel region; and
- A conductor maintained at a predetermined potential and disposed over one side of said wiring within the pixel region wherein an insulator is inserted between said conductor and said wiring so that said conductor does not contact said wiring, and the one side of said wiring is opposite to a side of said wiring at which said wiring is connected to said second semiconductor region, and, wherein said conductor is formed in the same layer as a light-screening layer in said pixel region.

The prior art of record does not disclose or suggest either in singly or in combination the following limitations and other elements in the claims:

- Reference Isogai et al. (US 6,188,093) do not disclose a conductor maintained at a predetermined potential and disposed over one side of said wiring within the pixel region wherein an insulator is inserted between said conductor and said wiring so that said conductor does not contact said wiring, and the one side of said wiring is opposite to a side of said wiring at which said wiring is connected to said second semiconductor region, and, wherein said conductor is formed in the same layer as a light-screening layer in said pixel region.
- Reference Kuhara et al. (US 6,043,550) do not disclose a conductor maintained at a predetermined potential and disposed over one side of said wiring within the pixel region wherein an insulator is inserted between said conductor and said

wiring so that said conductor does not contact said wiring, and the one side of said wiring is opposite to a side of said wiring at which said wiring is connected to said second semiconductor region, and, wherein said conductor is formed in the same layer as a light-screening layer in said pixel region.

Therefore, the above references do not disclose the claimed invention of present application and claims 1-3, 5-10, and 17 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai-Sing Louie whose telephone number is (571) 272-1709. The examiner can normally be reached on 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wsl
November 9, 2004.

LONG
ESTIMATED
DATE